Transitioning Cereal Systems to Adapt to Climate Change

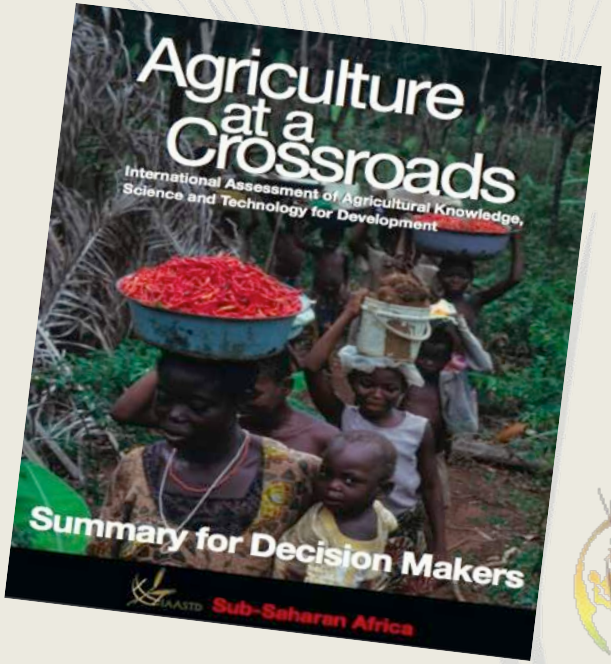
November 13-14, 2015

Funded through Award #2011-68002-30191 from USDA National Institute of Food and Agriculture

Why and How to transition cereal systems from problem to solution to the climate change challenge

Dr. Hans R. Herren
President Millennium Institute
Founder & Chairman of Biovision Foundation
hh@millennium-institute.org

"Business as usual is not an option" (IAASTD 2009)

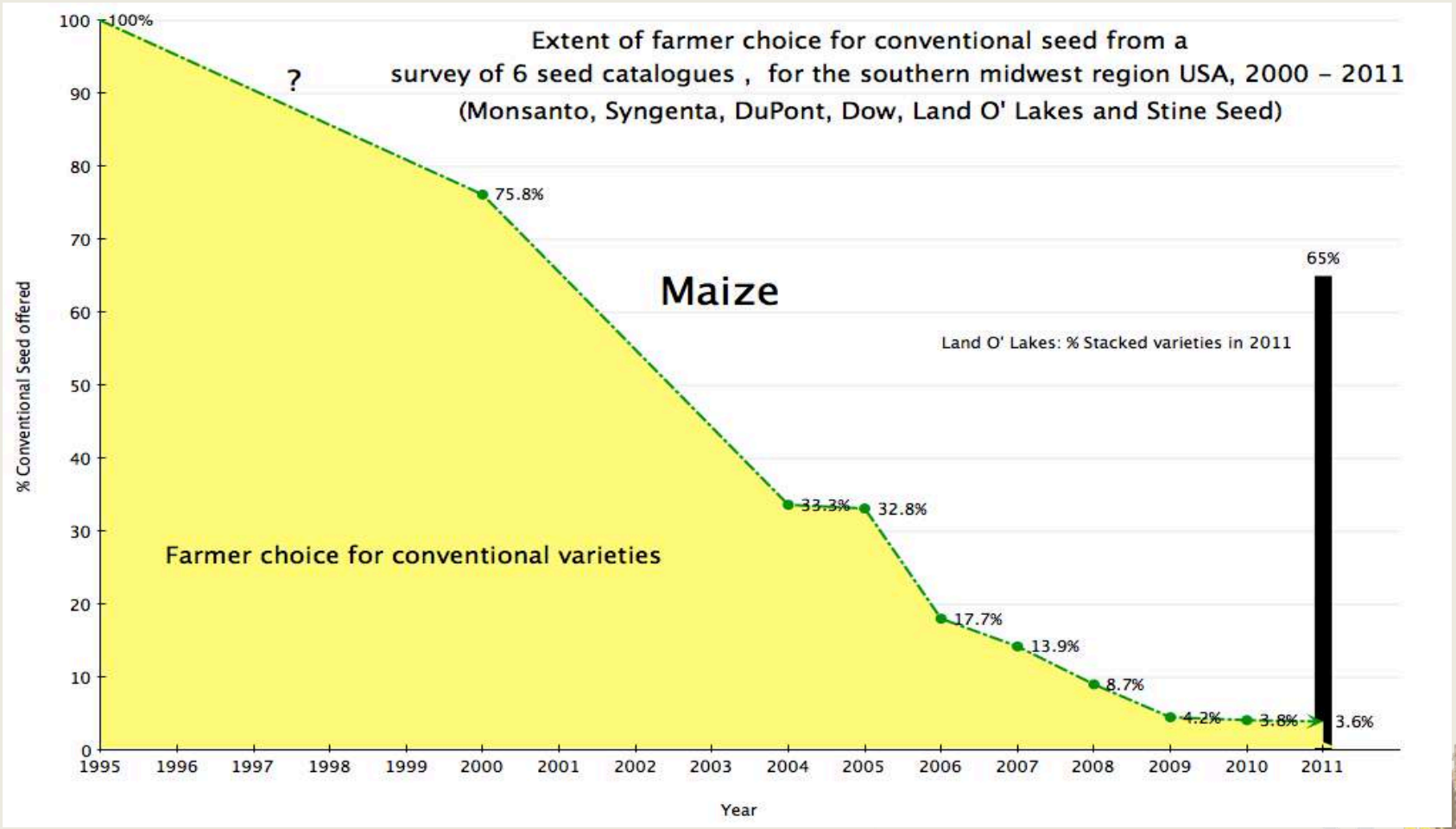


Hunger-poverty nexus; inequity, conflicts, migrations

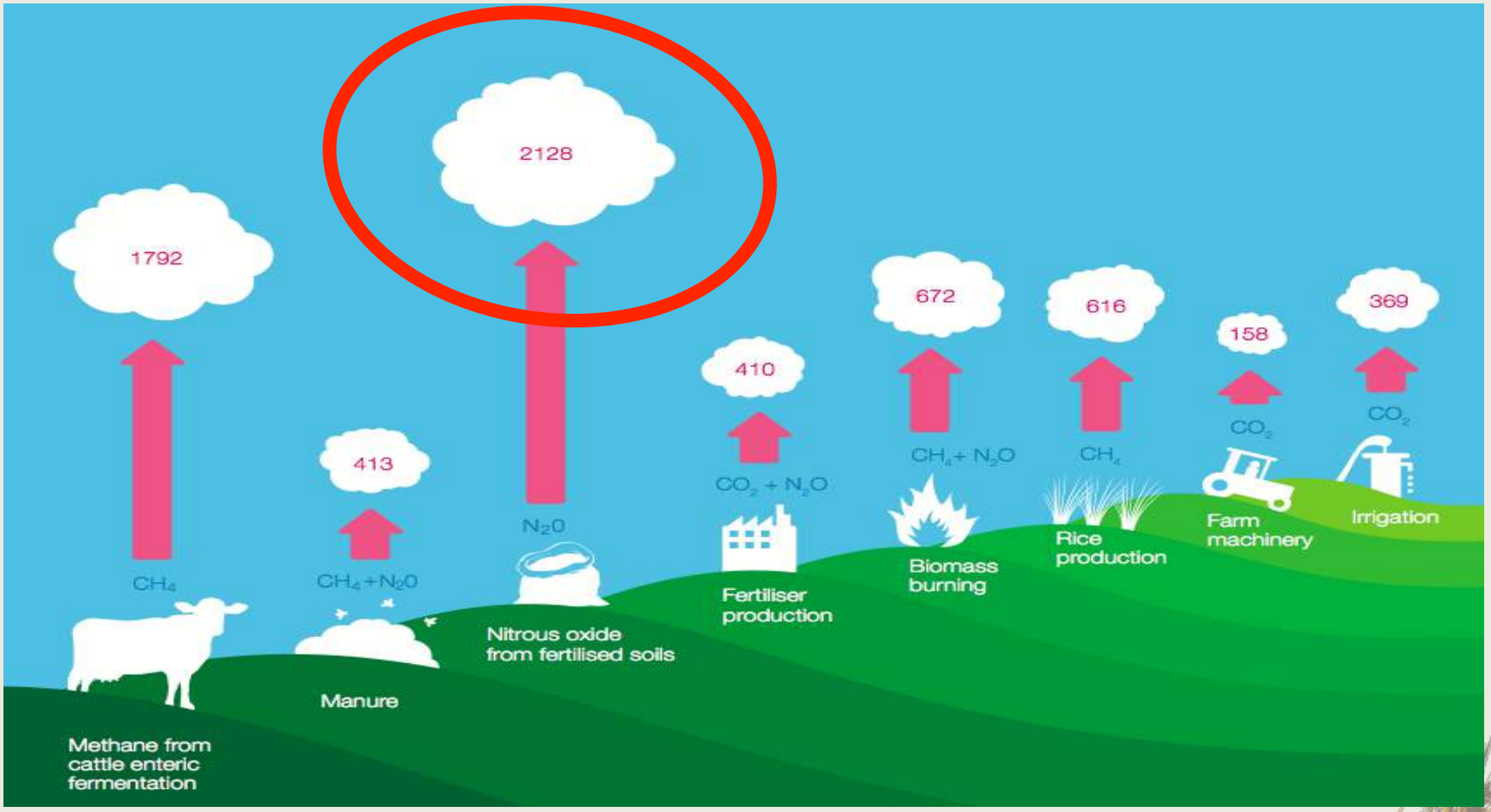
Today, a world of overproduction and waste

Biodiversity loss; Energy waste; Climate change

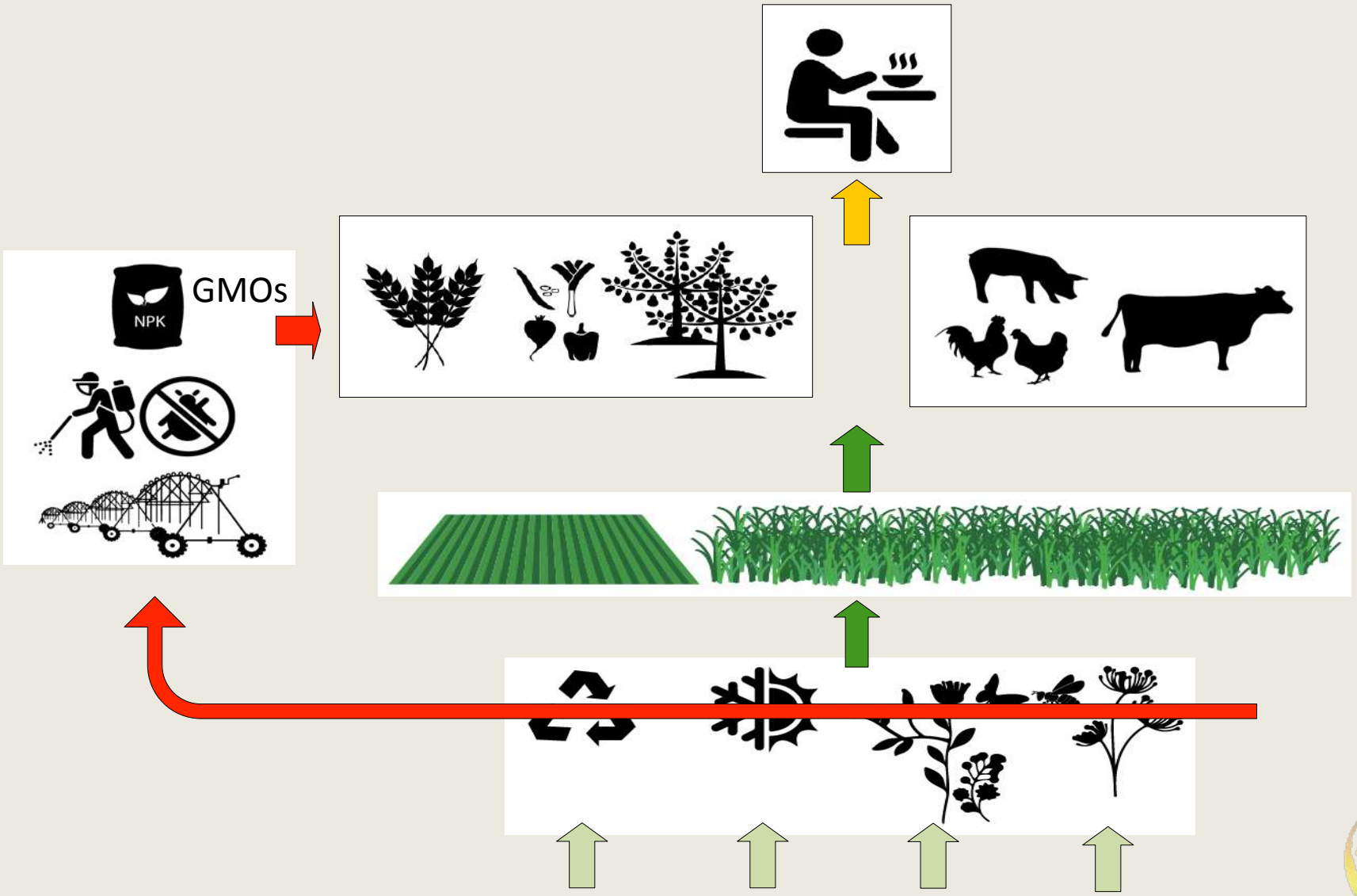
The main solutions: Quick fix
less genetic diversity? “Its in the Seed”



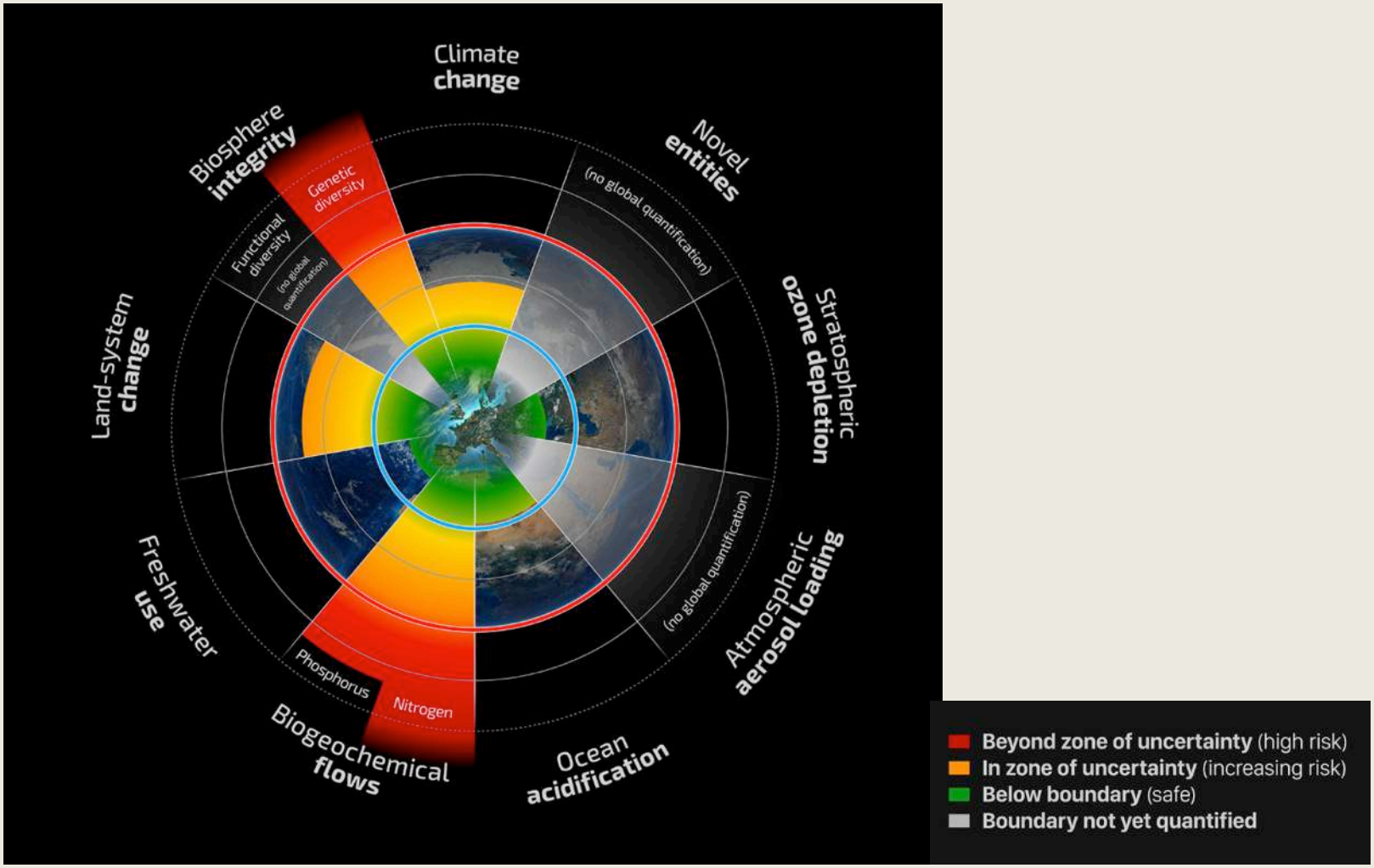
Green House Gases…..



Replacing nature with business



Reaching the planetary boundaries



Why sustainable agriculture?

Sustainable agriculture is key for sustainable development

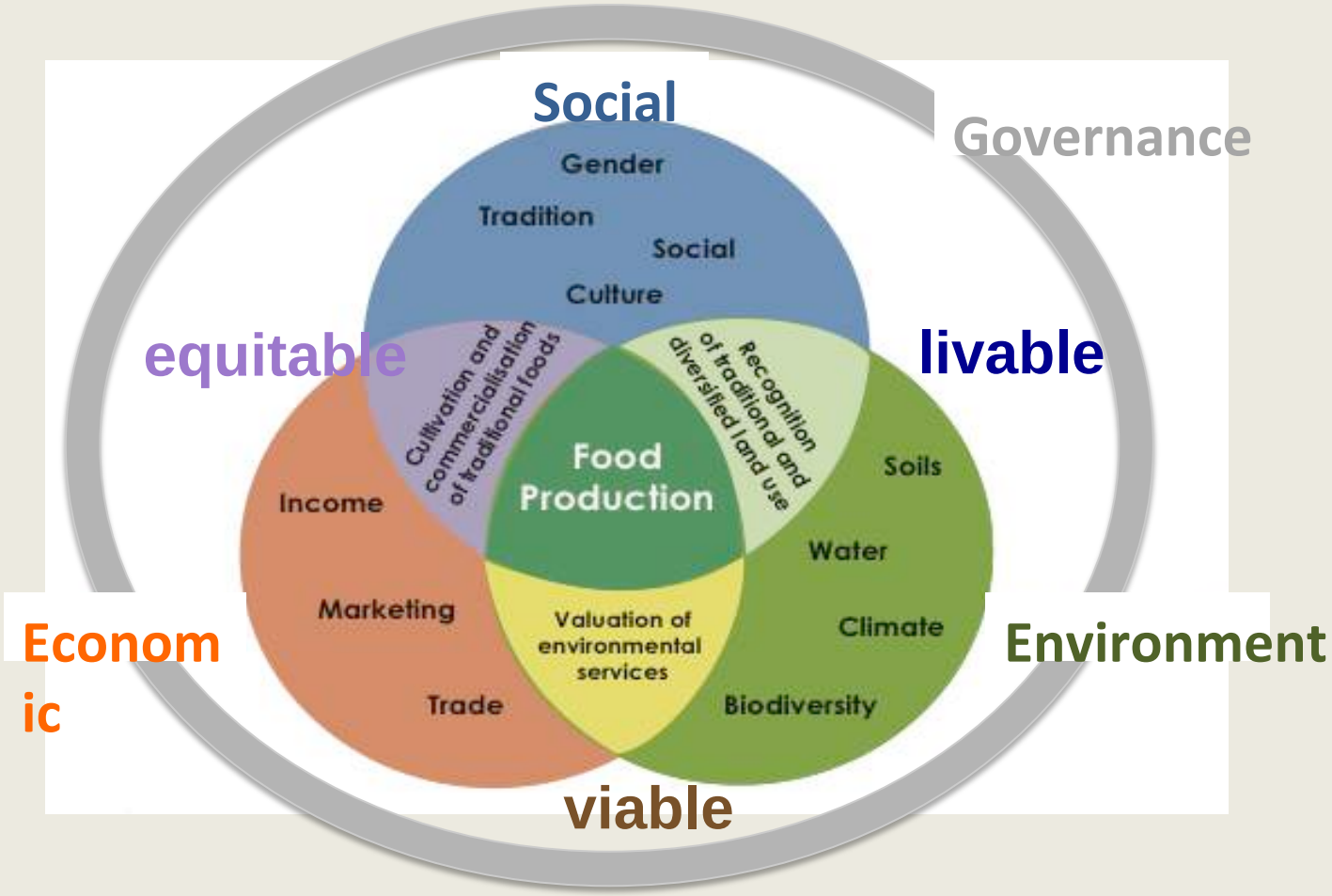
The Solution

A fundamental shift in Agricultural Knowledge Science and Technology and agri-food system policies, => institutions => capacity development => investments

Paradigm change: transition to agroecology: sustainable / ecological / regenerative agriculture addressing the multi-functionality and resilience needs of small-scale and family farmers (agroecology vs Climate Smart Agriculture)

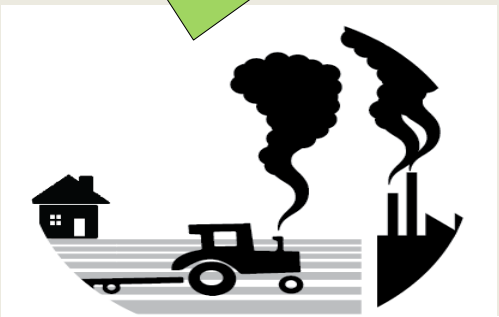
Need to use a systemic and holistic approach / National multistakeholder assessments (IAASTD/Rio+20 - SDGs/CFS)

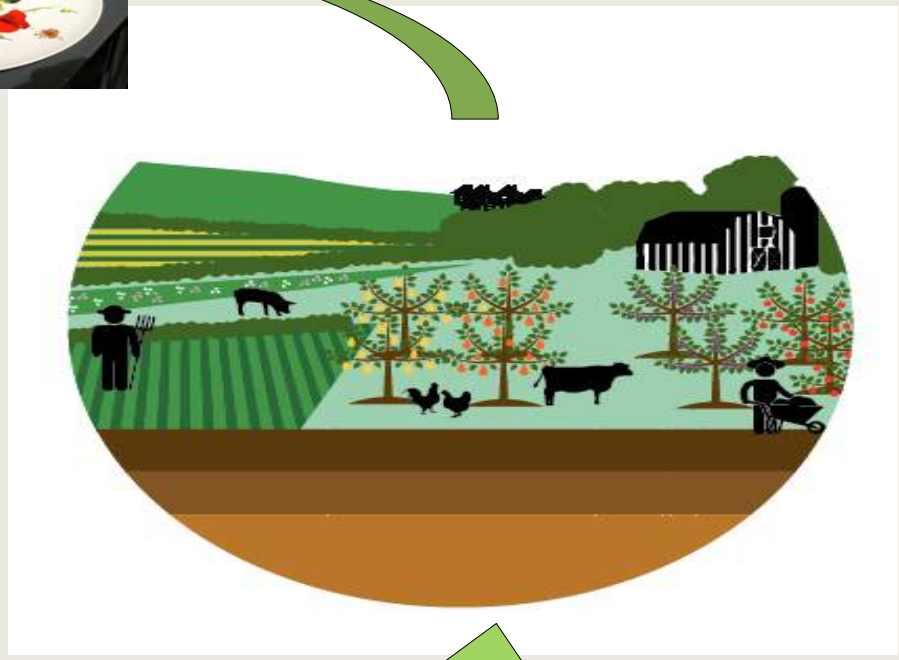
The 3 dimensions of sustainable development



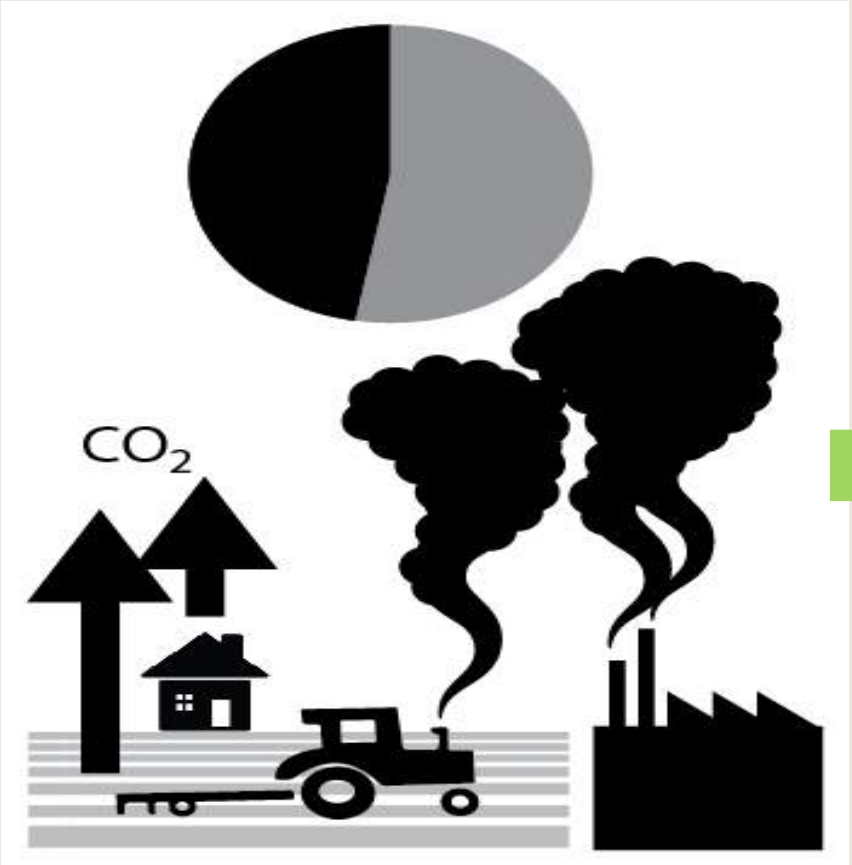
The transformation requires also a new diet

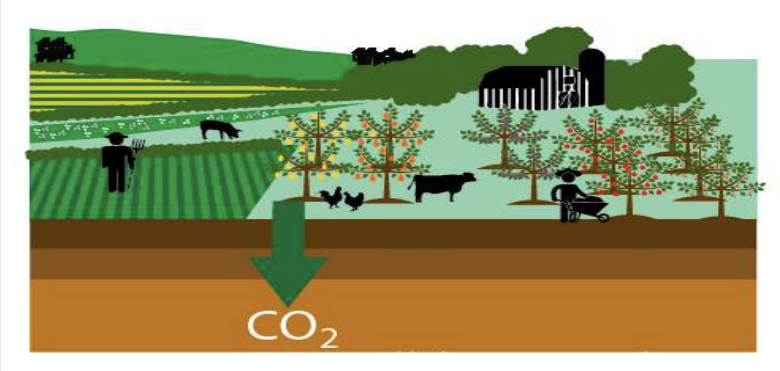
From problem to so(i)lution



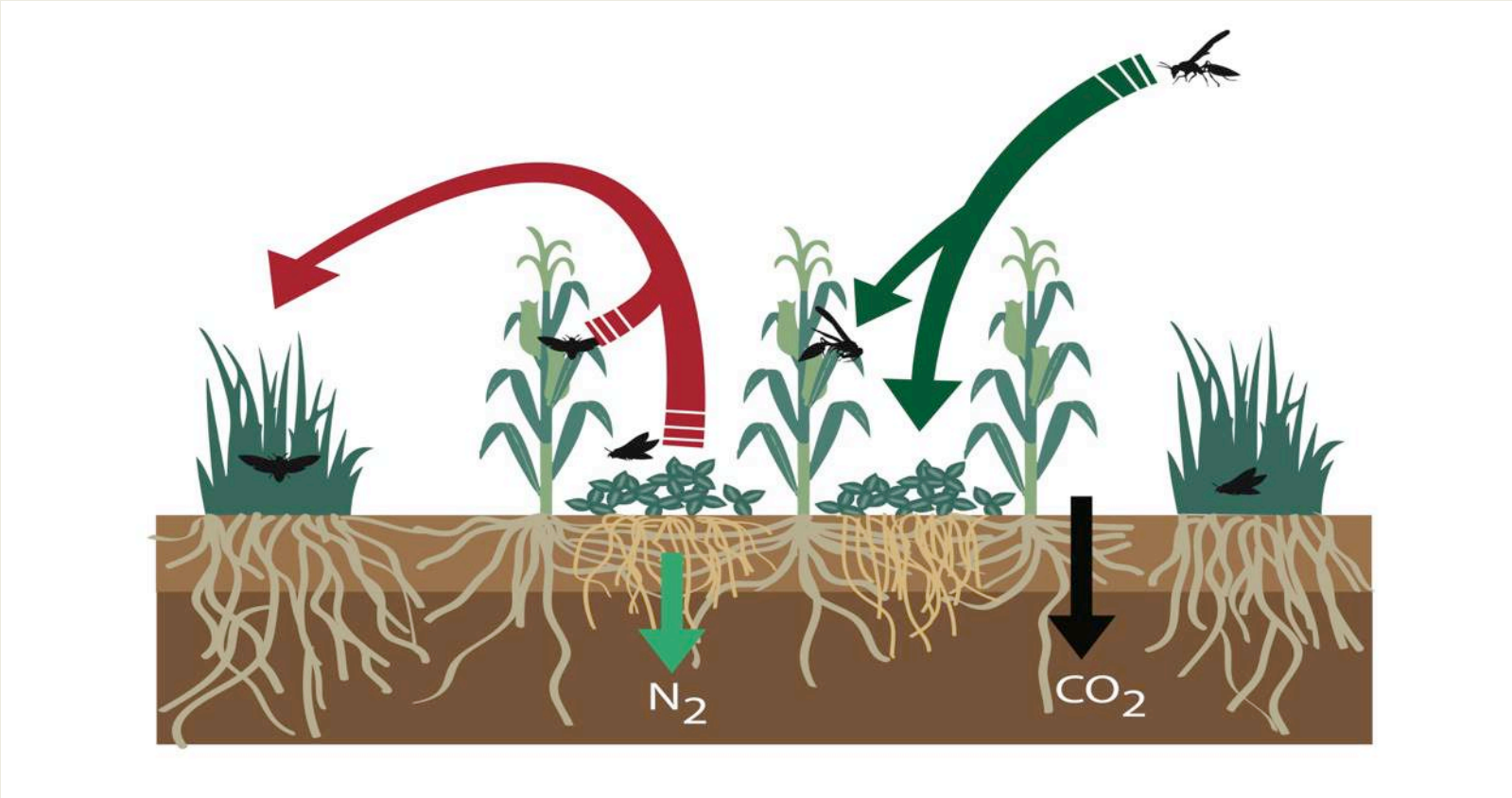


The carbon underground

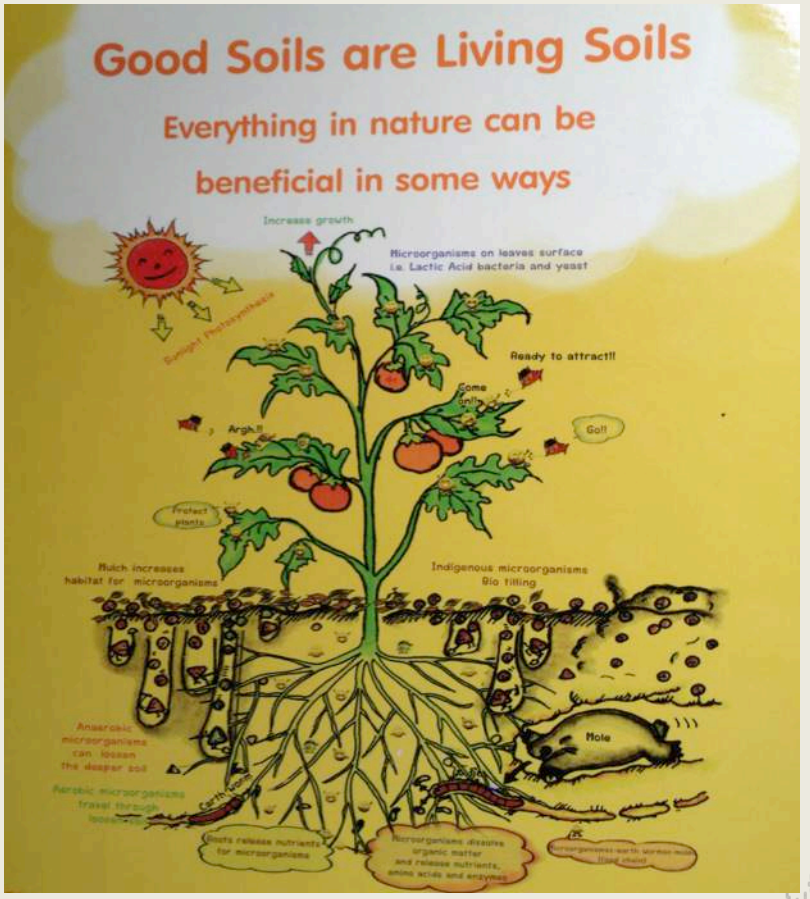




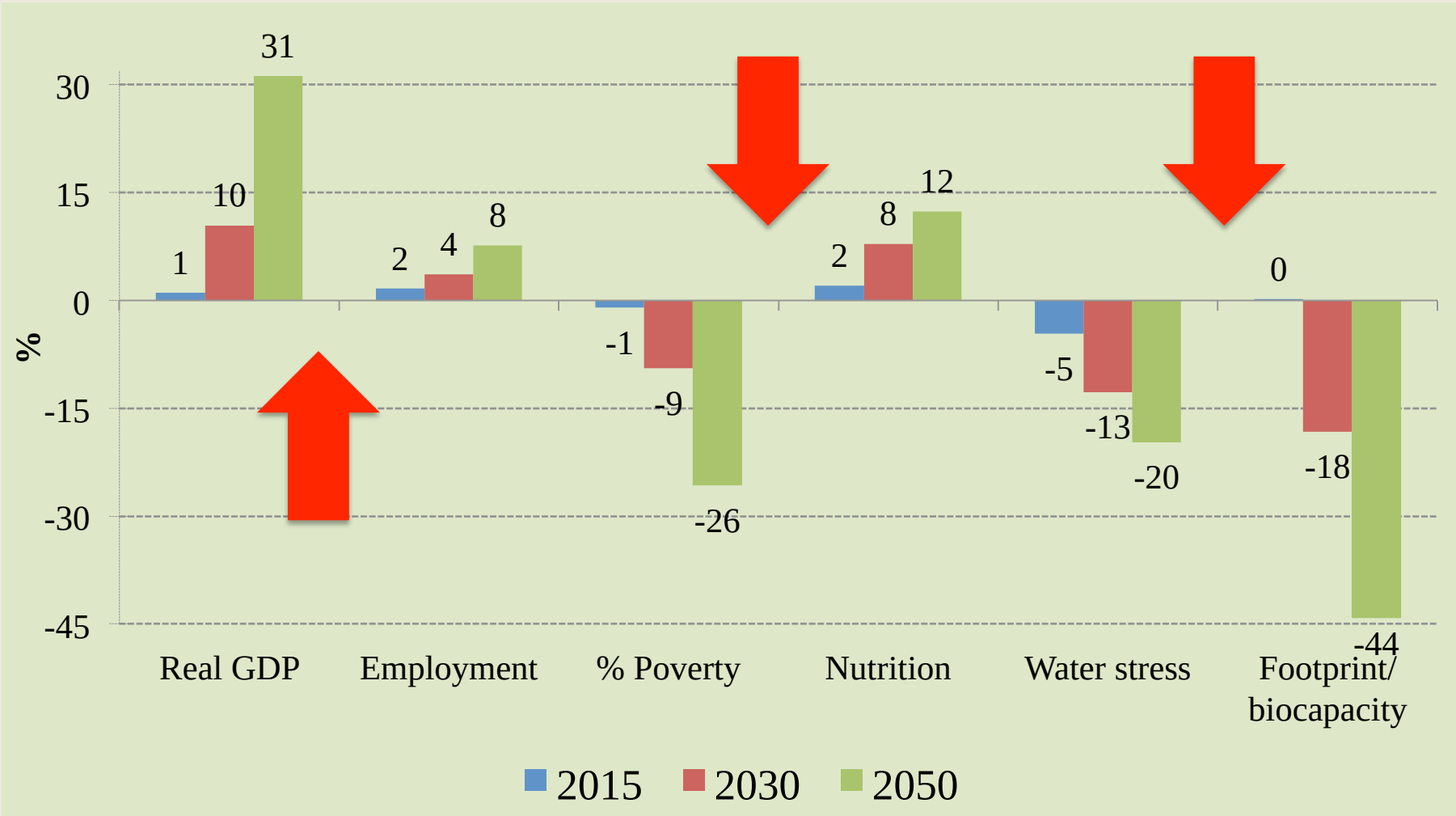
Using nature's services (ecosystem services)



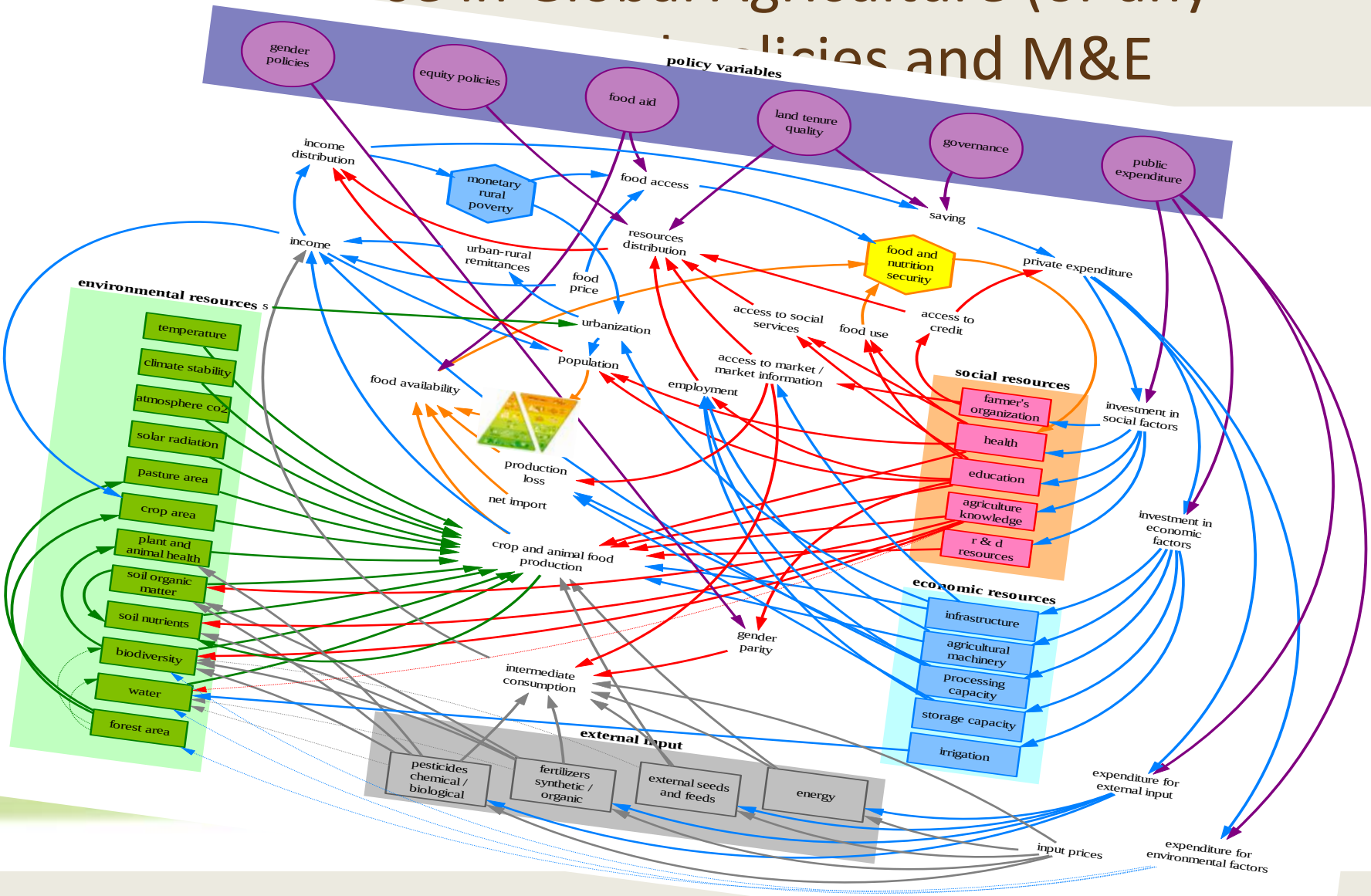
…more so(i)lutions



The transformation is possible.....
.....with only 1/3 of global ag subsidies ($140Bn/year)

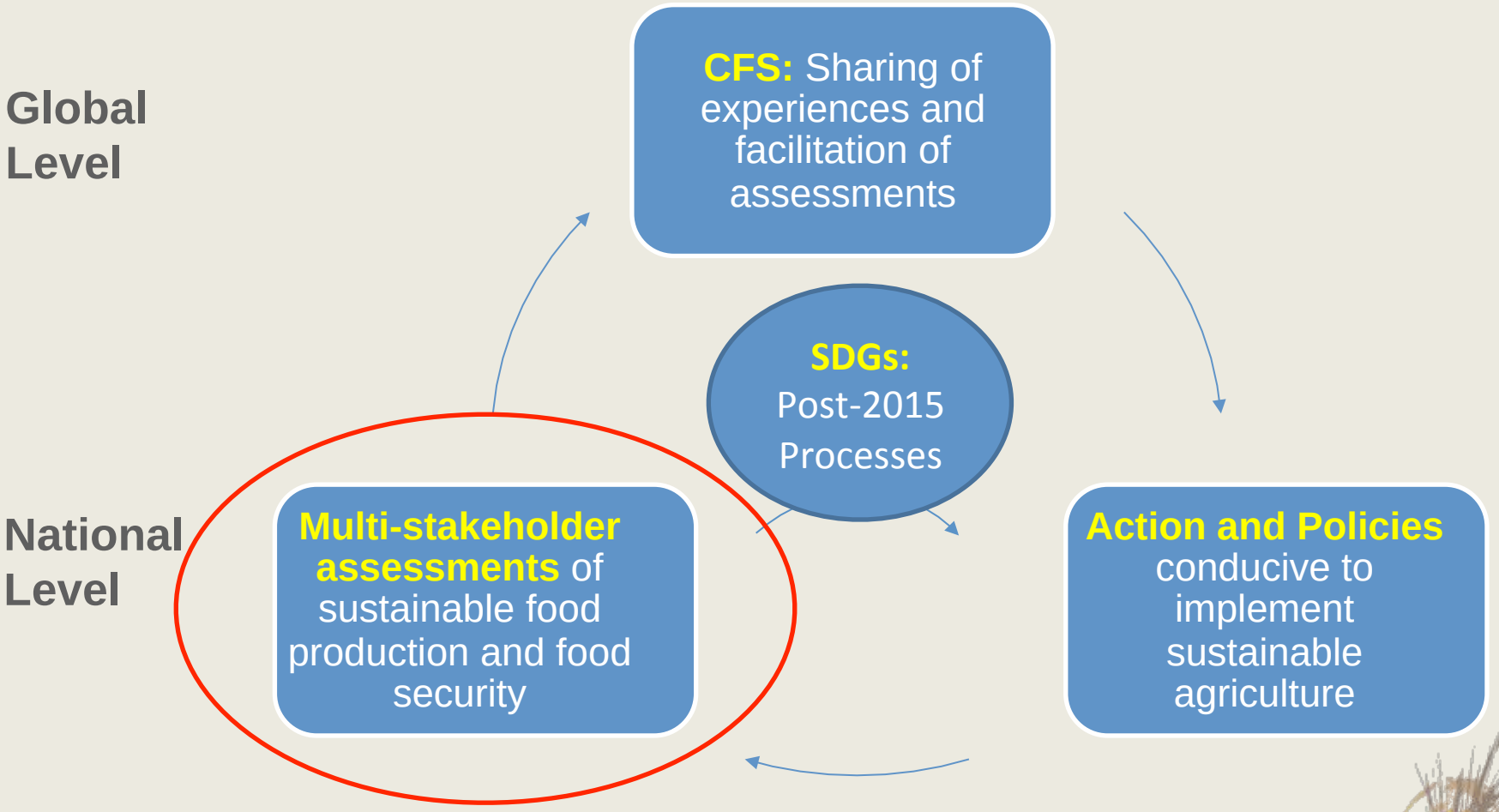


ing Course in Global Agriculture (or any licies and M&E



Changing Course in Global Agriculture (or any sector)

Changing course in global agriculture



Transitioning Cereal Systems to Adapt to Climate Change

REACCH
Regional Approaches to Climate Change –
PACIFIC NORTHWEST AGRICULTURE

Thank you

You cannot solve the problem with the same kind of thinking that created the problem

Albert Einstein